

WE CLAIM:

1. A single crystal seed alloy composition comprising:
 - 5 nickel; and,
in the proportion of 5 to 50 weight, % a further metal selected from the Transition Series of elements in Period VI of the Periodic Table of elements.
- 10 2. A single crystal seed alloy composition as claimed in claim 1, which alloy composition has a solidification temperature which is not less than 1300°C and not greater than 1400°C.
- 15 3. A single crystal seed alloy composition as claimed in claim 1 consisting essentially of nickel and the further metal.
- 20 4. A single crystal seed alloy composition as claimed in claim 1, wherein the further metal is present in the range 13 to 50 weight %.
- 25 5. A single crystal seed alloy composition as claimed in claim 1, wherein the alloy composition forms substantially no oxide layer when molten.
- 30 6. A single crystal seed alloy composition as claimed in claim 1, which alloy composition contains no aluminium.
- 35 7. A single crystal seed alloy composition as claimed in claim 1, which alloy composition contains no titanium.
8. A single crystal seed alloy composition as claimed in claim 1, wherein the alloy has a

solidification temperature range not greater than 50C°.

9. A single crystal seed alloy composition as
claimed in claim 8, wherein the alloy has a
5 solidification temperature range not greater than 20C°.

10. 10. A single crystal seed alloy composition
comprising:

nickel; and,

10 in the proportion of 5 to 50 weight, % a further
metal selected from the Transition Series of elements
in Period VI of the Periodic Table of elements,
wherein the alloy composition has a solidification
temperature which is not less than 1300°C and not
15 greater than 1400°C, and a solidification temperature
range which is not greater than 20C°.

20 11. A single crystal seed alloy composition as
claimed in claim 1, wherein the further metal comprises
tungsten in the range 5 to 50 weight %.

25 12. A single crystal seed alloy composition as
claimed in claim 11, wherein the tungsten is present in
the range 13 to 40 weight %.

30 13. 13. A single crystal seed alloy composition
consisting essentially of:

nickel; and,

tungsten in the proportion of 13 to 40 weight %,
30 wherein the alloy composition has a solidification
temperature which is not less than 1300°C and not
greater than 1400°C, and a solidification temperature
range which is not greater than 20C°.

35 14. 14. A single crystal seed alloy composition as
claimed in any one of claim 1, wherein the further

metal comprises tantalum in the range 5 to 50 weight %.

15. A single crystal seed alloy composition as
claimed in claim 14, wherein the tantalum is present in
the range 13 to 50 weight %.

16. A single crystal seed alloy composition as
claimed in claim 15, wherein the tantalum is present in
the range 20 to 45 weight %.

10 17. A single crystal seed alloy composition as
claimed in claim 16, wherein the tantalum is present in
the range 25 to 35 weight %.

15 18. A single crystal seed alloy composition
consisting essentially of:
 nickel; and,
 tantalum in the proportion of 25 to 35 weight %,
 wherein the alloy composition has a solidification
20 temperature which is not less than 1300°C and not
greater than 1400°C, and a solidification temperature
range which is not greater than 20C°.

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